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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,682	09/15/2003	Michael Scott Burnett	C03-05	9785
40990	7590	11/12/2004	EXAMINER	
ACUSHNET COMPANY 333 BRIDGE STREET P. O. BOX 965 FAIRHAVEN, MA 02719			HUNTER, ALVIN A	
			ART UNIT	PAPER NUMBER
			3711	

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/662,682	Applicant(s) BURNETT ET AL.	
	Examiner Alvin A. Hunter	Art Unit 3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed. *2 AAH*
- 6) ☒ Claim(s) 1-5, 7, 8, 10-19, 21, 24-31, 34-41, 44 and 46-54 is/are rejected.
- 7) ☒ Claim(s) 6, 9, 20, 23, 32, 33, 42, 45, 55 and 56 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/15/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 2, 3, and 35 are objected to because of the following informalities:  
in line 2 of both claims 2 and 3, the word "or" should read –of--,  
In line 2 of claim 35, the word "ration" should read –ratio--.  
Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 7, 8, 10-18, 21, 22, 24, 26-31, 34-44, and 46-54 are rejected under 35 U.S.C. 102(b) as being anticipated by McKeighen (USPN 5429365).

Regarding claim 1, McKeighen discloses a golf club head comprising a first body portion and a second body portion wherein the first body portion including a front face having a geometric face center and the club head inherently has a center of gravity of at least about 5mm lower than the geometric face center.

Regarding claim 2, McKeighen inherently discloses the front face having a point of maximum coefficient of restitution not higher than about 2mm below the geometric face center.

Regarding claim 3, McKeighen inherently discloses the front face having a point of maximum coefficient of restitution not higher than about 5mm below the geometric face center.

Regarding claim 4, McKeighen inherently discloses the point of maximum coefficient of restitution being centered with respect to the geometry,

Regarding claim 5, McKeighen discloses the first body being composed of a first material having a density and the second body portion composed of a second material having a density that is less than the density of the first material based upon the materials disclosed (See Column 4, lines 59 through 67).

Regarding claim 7, McKeighen discloses the second body having a density between about 0.1 to 4.0g/cc.

Regarding claim 8, McKeighen discloses the first material being titanium alloy and the second material being a metal or composite (See Column 4, lines 59 through 67).

Regarding claim 10, McKeighen discloses the first material being stainless steel alloy and the second material being a metal or composite (See Column 4, lines 59 through 67).

Regarding claim 11, McKeighen discloses the second material being titanium (See Column 3, lines 39 through 42; and Column 4, lines 59 through 67).

Regarding claims 12-15, claims are directed to a product by process. Applicant does not show why any of the process is critical therefore it submitted that McKeighen meets these processes because the final product is the same.

Regarding claim 16, McKeighen inherently discloses a maximum coefficient of greater than 0.80.

Regarding claim 17, McKeighen inherently discloses the point of maximum coefficient of restitution located approximate to a vertical plane including the geometric face center.

Regarding claim 18, McKeighen discloses the thickness of the front face greater at the sole section than the crown section.

Regarding claim 21, McKeighen discloses a golf club head comprising a first body having a front face interposed between a crown section and a sole section wherein the front face having a geometric face center and a point of maximum coefficient of restitution, the front face gradually increasing in thickness in a gradient from the crown section to the sole section, and the club head inherently has a center of gravity at least 6mm lower than the geometric face center.

Regarding claim 22, McKeighen discloses the first body being composed of a first material having a density and the second body portion composed of a second material having a density that is less than the density of the first material based upon the materials disclosed (See Column 4, lines 59 through 67).

Regarding claim 24, McKeighen discloses the second body having a density between about 0.1 to 4.0g/cc.

Regarding claim 26, McKeighen discloses the first material a titanium alloy or a stainless steel alloy and the second material being aluminum (See Column 4, lines 59 through 67).

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Regarding claims 27-29, claims are directed to a product by process. Applicant does not show why any of the process is critical therefore it submitted that McKeighen meets these processes because the final product is the same.

Regarding claim 30, McKeighen inherently discloses the point of maximum coefficient of restitution located approximate to a vertical plane including the geometric face center.

Regarding claim 31, McKeighen inherently discloses a maximum coefficient of greater than 0.80.

Regarding claim 34, McKeighen discloses a golf club head having a first body portion and a second body portion, wherein the first body portion including a front face having a variable face thickness and a second body having a low density crown section, wherein the club head inherently has a spin rate to launch angle ratio of less than about 275 at a geometric face center under robot test conditions.

Regarding claim 35, McKeighen inherently discloses the spin rate to launch angle ratio being less than 250.

Regarding claim 36, McKeighen inherently discloses the sweet spot approximately at the geometric face center or above.

Regarding claim 37, McKeighen discloses a golf club head having a first body portion forming at least a face portion and a sole formed of a first metal having a first density, a second portion forming at least a substantial portion of the crown section formed of a second metal having a second density less than the first, and a hosel

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member extending above the crown section formed of a material having a density no greater than the first density.

Regarding claim 38, McKeighen inherently discloses the front face having a point of maximum coefficient of restitution not higher than about 2mm below the geometric face center.

Regarding claim 39, McKeighen inherently discloses the front face having a point of maximum coefficient of restitution not higher than about 5mm below the geometric face center.

Regarding claim 40, McKeighen inherently discloses the point of maximum coefficient of restitution being centered with respect to the geometry,

Regarding claim 41, McKeighen discloses the first body being composed of a first material having a density and the second body portion composed of a second material having a density that is less than the density of the first material based upon the materials disclosed (See Column 4, lines 59 through 67).

Regarding claim 43, McKeighen discloses the second body having a density between about 0.1 to 4.0g/cc.

Regarding claim 44, McKeighen discloses the first material being titanium alloy and the second material being a metal or composite (See Column 4, lines 59 through 67).

Regarding claim 46, McKeighen discloses the first material being stainless steel alloy and the second material being a metal or composite (See Column 4, lines 59 through 67).

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Regarding claim 47, McKeighen discloses the second material being titanium (See Column 3, lines 39 through 42; and Column 4, lines 59 through 67).

Regarding claims 48-51, claims are directed to a product by process. Applicant does not show why any of the process is critical therefore it submitted that McKeighen meets these processes because the final product is the same.

Regarding claim 52, McKeighen inherently discloses a maximum coefficient of greater than 0.80.

Regarding claim 53, McKeighen inherently discloses the point of maximum coefficient of restitution located approximate to a vertical plane including the geometric face center.

Regarding claim 54, McKeighen discloses the thickness of the front face greater at the sole section than the crown section.

3. Claims 21, 23, 30, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Zebelean (USPN 4432549).

Regarding claim 21, Zebelean discloses a golf club head having a first body comprising a front face interposed between a crown section and a sole section wherein the front face has a geometric center and a point of maximum coefficient of restitution. The front face gradually increases in thickness in a gradient from the crown section to the sole section wherein the club head inherently has a center of gravity at least 6m lower than the geometric center.

Regarding claim 23, Zebelean discloses that the club head can be made in more than two parts. Therefore, one having ordinary skill in the art would have found it



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obvious to a second body made of any components of the club head so long as the final product is a club head.

Regarding claim 30, Zebelean inherently discloses the point of maximum coefficient of restitution is located approximate to a vertical plane including the geometric face center.

Regarding claim 31, Zebelean inherently discloses the club head having a maximum coefficient of restitution greater than 0.80.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 16, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molitor et al. (USPN 4762322).

Regarding claim 1, Molitor et al. discloses a golf club head comprising a first body portion and a second body portion, the first body portion including a front face having a geometric face center. Molitor et al. discloses the face height of the driver being 1.650 inches, or 41.9mm, wherein the center of the face would be at a height of 0.825 inches, or 20.95mm (See Table 1). Molitor et al. also discloses the center of gravity being no more than 0.7 inches from the sole which places the center of gravity at least 0.125<sup>inches</sup> from the center of the face, or 3.175mm from the<sup>face center</sup> (See Column 5, lines 27 through 42). One having ordinary skill in the art would have found it obvious to have the

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center of gravity at any distance so long as it improves the hitting performance of the club head.

Regarding claim 2, Molitor et al. inherently has a maximum coefficient of restitution no higher than 2mm below the geometric face center.

Regarding claim 3, Molitor et al. inherently has a maximum coefficient of restitution no higher than 2mm below the geometric face center.

Regarding claim 4, Molitor et al. inherently has a maximum coefficient of restitution is centered with respect to geometry.

Regarding claim 16, Molitor et al. inherently has a maximum coefficient of restitution greater than 0.80.

Regarding claim 17, Molitor inherently discloses the point of maximum coefficient of restitution being located approximate to a vertical plane including the geometric face.

Regarding claim 19, Molitor discloses the weight portion being integral with a sole section at a distance away from the face (See Abstract and Figure 1).

#### ***Allowable Subject Matter***

Claims 6, 9, 20, 23, 32, 33, 42, 45, 55, and 56 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is 703-306-

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5693. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Vidovich, can be reached on 703-308-1513. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AKH

Alvin A. Hunter, Jr.

  
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